

Experiment # 5

Molar Mass by Vapor Density

Name -----

Date ----- Section -----

Lab Partners: -----

Data Section

1. Temperature of water -----317.5-----K
2. Weight of flask, foil and condensed vapor -----117.95-----
g
3. Weight of empty flask plus foil -----117.71-----
g
4. Weight of condensed vapor -----0.24----- g
5. Volume of water required to fill the flask
(that is equal to the volume of the gas) -----0.265L-----
mL
6. Barometric Pressure -----1.0015
atm----- mmHg
7. Molar mass of compound (see Equation 1
and 2- remember to use the proper units
for ideal gas equation. Show your work) -----